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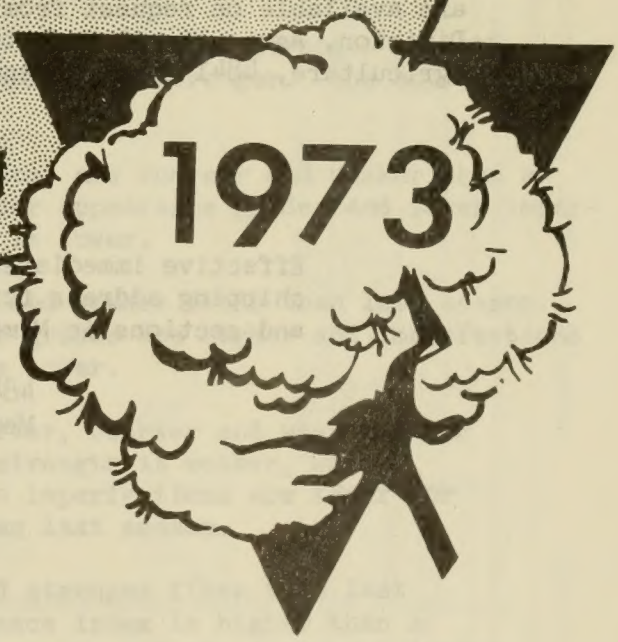
REPORT NO. 11

# Cotton Fiber and Processing Test Results

U.S. DEPOSITORY

## CROP of 1973



Agricultural Marketing Service
U.S. DEPARTMENT OF AGRICULTURE
Memphis, Tenn. 38122 January 18, 1974

This is the eleventh of a series of reports of fiber and processing test results from the 1973 cotton crop. Subsequent reports in this series will follow at approximately two-week intervals during the harvesting season, and will be summarized in a comprehensive report at the end of the season. This series will present data on the same subject as "Summary of Cotton Fiber and Processing Test Results, Crop of 1972", May 1973. The summary also includes a detailed description of the tests published in these reports. These reports are available on request from the Standardization Section, Cotton Division, Agricultural Marketing Service, U. S. Department of Agriculture, 4841 Summer Avenue, Memphis, Tn. 38122.

NOTICE

Effective immediately, mailing address as well as shipping address for all Cotton Division offices and sections in Memphis, Tennessee, is:

4841 Summer Avenue
Memphis, Tn. 38122

# COTTON FIBER AND PROCESSING TEST RESULTS, CROP OF 1973

## Discussion of Test Results

Cotton testing laboratories of the Agricultural Marketing Service, USDA, report that fibers from the Southwest short staple samples tested, to date, are coarser and stronger than through the same period a year ago. Yarns spun from these samples are weaker with lower appearance grades than a year ago. Yarn imperfections were fewer in samples tested to date. Average spinning potential yarn number is lower.

Averages for all medium staple samples tested through January 11 show slightly weaker fiber than a year ago. Yarns spun from these samples show lower appearance grades.

Medium staple samples tested from the Southeast show coarser and weaker fiber at 1/8" gage tests. Shirley Analyzer nonlint content is higher than a year ago. More yarn imperfections were noted as compared with a year ago. Spinning potential number is lower.

Medium staple samples from the South Central belt show longer, coarser and weaker fibers than a year ago. Yarns spun from these samples show about the same average results as a year ago at this time except the spinning potential number is lower.

Southwest medium staple samples show approximately the same fiber test results as samples of a year ago. Picker and card waste is less. Yarns spun from these samples show lower appearance grades and a lower spinning potential number.

Medium staple samples from the West show fibers to be longer and stronger at both zero and 1/8 inch gage. Yarns spun from these samples are stronger. The appearance index is lower than a year ago.

Averages for all long staple samples tested, to date, are coarser and weaker than a year ago. Yarns spun from these samples show higher appearance grades and fewer imperfections. Average spinning potential yarn number is lower.

Southeast long staple samples tested show coarser and weaker fiber than last season. Yarns spun are weaker than a year ago. Appearance grades are higher and imperfections are fewer than last season. Spinning potential is lower.

South Central long staple samples tested show shorter, coarser and weaker fiber than last season. Comber waste is higher. Yarn strength is weaker, while appearance grades are higher than a year ago. Yarn imperfections are fewer for the combed yarns. Spinning potential is lower than last season.

Long staple samples from the West show shorter and stronger fiber than last season. Yarn strength is stronger and the appearance index is higher than a year ago. Yarn imperfections are fewer than last season and the average spinning potential number is higher.

Extra long staple American Pima samples from the West show fiber longer, coarser and stronger than a year ago. Comber waste is higher. Combed yarn strength is stronger than last season. Yarn appearance grades are higher while yarn imperfections are more than a year ago.

Table 1.--Cotton: Averages of fiber and processing tests from selected gin points in the United States through January 11, 1974 1/

| Staple group Area, and Crop year | Lots tested | Fiber test results | | | | | | Processing test results | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Fibrograph | | Mike fineness | Fiber strength | | S A nonlint | P & C waste | Yarn quality | | | Spin. Potent. |
| | | 2.5% span | 50/2.5 unif. | | Zero gage | 1/8" gage | | | Skein str. | Appearance | Imperfections | |
| | No. | Inches | Pct. | Rdg. | Mpsi | G/tex | Pct. | Pct. | Lbs. | Index | No. | Yarn No. |
| | | | | | | | | | 22s Carded Yarn | | | |
| Short Staple: | | | | | | | | | | | | |
| Southwest | | | | | | | | | | | | |
| 1972 | 44 | .97 | 45 | 4.2 | 81 | 21 | 3.6 | 6.5 | 94 | 117 | 27 | 46 |
| 1973 | 60 | .97 | 46 | 4.5 | 83 | 21 | 3.3 | 6.3 | 91 | 108 | 16 | 42 |
| Medium Staple: | | | | | | | | | | | | |
| Southeast | | | | | | | | | | | | |
| 1972 | 60 | 1.08 | 45 | 4.3 | 83 | 23 | 3.0 | 6.1 | 104 | 104 | 16 | 66 |
| 1973 | 54 | 1.08 | 46 | 4.5 | 82 | 22 | 3.6 | 6.0 | 101 | 105 | 21 | 61 |
| South Central | | | | | | | | | | | | |
| 1972 | 160 | 1.08 | 45 | 4.3 | 83 | 23 | 2.8 | 6.2 | 102 | 109 | 19 | 64 |
| 1973 | 165 | 1.10 | 45 | 4.5 | 81 | 22 | 3.1 | 5.8 | 101 | 107 | 19 | 61 |
| Southwest | | | | | | | | | | | | |
| 1972 | 42 | 1.06 | 45 | 4.2 | 83 | 22 | 3.3 | 6.4 | 101 | 118 | 24 | 61 |
| 1973 | 50 | 1.07 | 45 | 4.3 | 82 | 22 | 3.0 | 5.7 | 98 | 97 | 23 | 56 |
| West | | | | | | | | | | | | |
| 1972 | 60 | 1.09 | 45 | 4.4 | 90 | 24 | 2.6 | 5.5 | 110 | 121 | 17 | 66 |
| 1973 | 67 | 1.12 | 46 | 4.4 | 93 | 25 | 2.4 | 5.3 | 117 | 102 | 17 | 68 |
| U. S. Average | | | | | | | | | | | | |
| 1972 | 322 | 1.08 | 45 | 4.3 | 85 | 23 | 2.9 | 6.0 | 104 | 113 | 19 | 64 |
| 1973 | 336 | 1.09 | 45 | 4.4 | 84 | 22 | 3.0 | 5.7 | 104 | 104 | 20 | 62 |
| Significant difference 2/ | | 0.02 | 2 | 0.2 | 2 | 1 | 0.5 | 0.5 | 4(22s) | 5 | 2 | 3 |

1/ Based on a limited number of samples of modal quality

2/ Minimum differences considered to be significant for comparisons in this table. These guides are based upon averages of a number of lots and are not applicable to individual samples.

Table 1.--Cotton: Averages of fiber and processing tests from selected gin points in the United States through January 11, 1974 1/ (Continued)

| Staple group, Area, and Crop year | Lots | Fiber Test Results: Length: Span | Length: Unif | Mike | Strength: Zero gage | Strength: 1/8" gage | SA Non-lint | Processing Test Results: P&C Waste | Comber Waste | Yarn Quality: Strength: carded | Strength: combed | Appearance: carded | Appearance: combed | Imprfctns: card | Imprfctns: comb | SPY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | In. | Pct. | Rdg. | Mpsi | G/tx | Pct. | Pct. | Pct. | Lbs. | Lbs. | Indx | Indx | No. | No. | No. |
| | | | | | | | | | | 22s Carded & Combed Yarn | | | | | | |
| Long Staple: | | | | | | | | | | | | | | | | |
| Southeast | | | | | | | | | | | | | | | | |
| 1972 | 19 | 1.12 | 44 | 4.3 | 85 | 24 | 3.6 | 8.5 | 16.9 | 107 | 123 | 102 | 117 | 24 | 10 | 68 |
| 1973 | 17 | 1.12 | 45 | 4.6 | 82 | 23 | 3.9 | 8.6 | 17.0 | 103 | 119 | 117 | 124 | 14 | 7 | 65 |
| South Central | | | | | | | | | | | | | | | | |
| 1972 | 4 | 1.16 | 44 | 4.0 | 88 | 24 | 4.2 | 8.8 | 16.0 | 116 | 131 | 100 | 110 | 20 | 11 | 75 |
| 1973 | 6 | 1.14 | 44 | 4.3 | 86 | 24 | 3.8 | 8.8 | 17.3 | 108 | 126 | 117 | 127 | 19 | 8 | 64 |
| West | | | | | | | | | | | | | | | | |
| 1972 | 15 | 1.17 | 44 | 3.6 | 91 | 25 | 2.5 | 7.2 | 15.6 | 126 | 145 | 91 | 100 | 26 | 13 | 86 |
| 1973 | 14 | 1.15 | 45 | 3.6 | 92 | 27 | 2.6 | 7.6 | 15.4 | 134 | 152 | 95 | 106 | 18 | 10 | 90 |
| U. S. Average | | | | | | | | | | | | | | | | |
| 1972 | 38 | 1.14 | 44 | 4.0 | 88 | 24 | 3.3 | 8.0 | 16.3 | 116 | 133 | 97 | 109 | 24 | 11 | 76 |
| 1973 | 37 | 1.14 | 45 | 4.2 | 86 | 24 | 3.4 | 8.2 | 16.4 | 116 | 133 | 109 | 118 | 17 | 9 | 74 |
| | | | Array | | | | | | | | | 50's Combed Yarn | | | | |
| | | | | | | | | American Pima | | | | | | | | |
| Extra Long Staple: | | | | | | | | | | | | | | | | |
| West | | | | | | | | | | | | | | | | |
| 1972 | 20 | 1.44 | 32 | 3.6 | 97 | 32 | 2.6 | 7.8 | 17.7 | | 63 | | 113 | | 3 | |
| 1973 | 16 | 1.46 | 31 | 3.8 | 101 | 33 | 3.3 | 8.0 | 18.4 | | 67 | | 122 | | 9 | |
| Significant Difference 2/ | | 0.02 | 2 | 0.2 | 2 | 1 | 0.5 | 0.5 | 0.5 | 4(22s) | 4(22s) 2(50s) | 5 | 5 | 2 | 2 | 3 |

1/ Based on a limited number of samples of modal quality

2/ Minimum differences considered to be significant for comparisons in this table. These guides are based upon averages of a number of lots and are not applicable to individual samples.

Table 2 --Cotton, American upland short staple: Quality characteristics by production areas, crop of 1973

| Production Area, Classification & Sample Number | | | Fiber Test Results | | | | | | | | | Processing Test Results - Carded Yarns | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Digital Fibrograph | | Mike | Fiber Strength | | Elon-gat'n 1/8" | S.A. Non-lint | Color Raw Stock | | P & C Waste | Strength | | Elongation | | Appearance Index | | Imprfect'ns | | Spin. Poten-tial |
| No | Grade Name & Code | Stple | 2.5% span | Unif | | Zero Gage | 1/8" Gage | | | Gra | Yel | | 8s or 74 tx | 22s or 27 tx | 8s or 74 tx | 22s or 27 tx | 8s or 74 tx | 22s or 27 tx | 8s or 74 tx | 22s or 27 tx | |
| | | 32s | In | Pct | Rdg | Mpsi | G/tex | Pct | Pct | No | No | Pct | Lbs | Lbs | Pct | Pct | No | No | No | No | No |
| SOUTHWEST | AREA | | | | | | | | | | | | | | | | | | | | |
| CENTRAL TEXAS | | | | | | | | | | | | | | | | | | | | | |
| PRINCETON | | | | | | | LANKART LX 571 | | | | | | 98 PERCENT | | | | | | | | |
| 3 LM | | 51 1/31 | .99 | 46 | 5.0 | 79 | 21 | 6.5 | 3.0 | 4 | 3 | 6.1 | 273 | 85 | 7.2 | 5.9 | 120 | 100 | 14 | 13 | 45 |
| WAXAHACHIE | | | | | | | LANKART 57 | | | | | | 99 PERCENT | | | | | | | | |
| 3 LM LT SP | | 52 2/31 | 1.00 | 46 | 4.7 | 82 | 22 | 6.2 | 3.7 | 4 | 3 | 7.0 | 273 | 89 | 6.8 | 6.0 | 120 | 90 | 24 | 25 | 45 |
| NORTHWEST TEXAS | | | | | | | | | | | | | | | | | | | | | |
| BULA | | | | | | | RILCOT 90 | | | | | | 80 PERCENT | | | | | | | | |
| 3 MID LT SP | | 32 30 | 0.91 | 48 | 3.9 | 85 | 23 | 6.7 | 3.9 | 2 | 4 | 5.6 3/ | 305 | 93 | 7.9 | 6.8 | 130 | 120 | 13 | 12 | 42 |
| BURKBURNETT | | | | | | | LANKART LX 571 | | | | | | 100 PERCENT | | | | | | | | |
| 2 SLM | | 41 32 | 0.98 | 47 | 4.8 | 76 | 20 | 7.3 | 3.1 | 2 | 3 | 6.6 | 300 | 94 | 8.6 | 7.3 | 120 | 110 | 16 | 13 | 48 |
| EDMONSON | | | | | | | STRIPPER 31 | | | | | | 95 PERCENT | | | | | | | | |
| 2 MID LT SP | | 32 30 | 0.95 | 46 | 3.4 | 81 | 22 | 6.8 | 4.5 | 2 | 5 | 6.0 3/ | 297 | 92 | 7.9 | 6.8 | 120 | 90 | 22 | 15 | 40 |
| ELDORADO | | | | | | | LANKART 57 | | | | | | 85 PERCENT | | | | | | | | |
| 3 LM LT SP | | 52 2/31 | 0.99 | 43 | 4.1 | 76 | 21 | 7.5 | 3.3 | 3 | 3 | 7.3 | 278 | 87 | 8.1 | 6.9 | 130 | 100 | 19 | 22 | 41 |
| MEADOW | | | | | | | LANKART 57 | | | | | | 70 PERCENT | | | | | | | | |
| 3 SLM | | 41 31 | 0.95 | 46 | 4.3 | 83 | 21 | 6.3 | 3.1 | 1 | 3 | 6.3 3/ | 295 | 93 | 7.8 | 6.4 | 120 | 90 | 21 | 15 | 47 |
| RALLS | | | | | | | PAYMASTER 909 | | | | | | 70 PERCENT | | | | | | | | |
| 3 MID | | 31 32 | 0.96 | 46 | 4.1 | 78 | 23 | 7.8 | 2.9 | 1 | 3 | 4.9 3/ | 309 | 97 | 8.1 | 6.8 | 120 | 100 | 16 | 11 | 46 |
| RULE | | | | | | | LANKART LX 571 | | | | | | 100 PERCENT | | | | | | | | |
| 3 SLM LT SP | | 42 31 | 1.02 | 44 | 5.0 | 79 | 21 | 6.8 | 2.4 | 3 | 3 | 7.3 | 286 | 88 | 7.7 | 6.4 | 130 | 100 | 15 | 13 | 45 |
| OKLAHOMA | | | | | | | | | | | | | | | | | | | | | |
| CARNEGIE | | | | | | | LANKART 57 | | | | | | 100 PERCENT | | | | | | | | |
| 2 MID LT SP | | 32 31 | .97 | 46 | 4.5 | 77 | 20 | 7.4 | 2.5 | 2 | 3 | 5.5 | 272 | 89 | 7.9 | 6.5 | 120 | 100 | 11 | 10 | 44 |
| GOTEBO | | | | | | | LANKART 57 | | | | | | 99 PERCENT | | | | | | | | |
| 2 SLM | | 41 31 | 0.95 | 46 | 4.8 | 79 | 20 | 7.0 | 4.8 | 2 | 3 | 6.6 | 279 | 85 | 8.2 | 6.7 | 130 | 120 | 10 | 9 | 36 |

1/ Reduced from 41 because of bark
2/ Reduced from 42 because of bark
3/ Cotton stuck to processing rolls

Table 3 --Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1973

| Production Area, Classification & Sample Number | | | Fiber Test Results | | | | | | | | | Processing Test Results - Carded Yarns | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Digital Fibrograph | | Mike | Fiber Strength | | Elon-gat'n 1/8" | S.A. Non-Lint | Color Raw Stock | | P & C Waste | Strength | | Elongation | | Appearance Index | | Imprfect'ns | | Spin. Poten-tial |
| No | Grade Name & Code | Stple | 2.5% span | Unif. | | Zero Gage | 1/8" Gage | | | Gra | Yel | | 22s or 27 tx | 50s or 12 tx | 22s or 27 tx | 50s or 12 tx | 22s or 27 tx | 50s or 12 tx | 22s or 27 tx | 50s or 12 tx | |
| | | 32s | In | Pct | Rdg | Mpsi | G/tex | Pct | Pct | No | No | Pct | Lbs | Lbs | Pct | Pct | No | No | No | No | No |
| SOUTHEAST AREA | | | | | | | | | | | | | | | | | | | | | |
| ALABAMA | | | | | | | | | | | | | | | | | | | | | |
| GREENBRIER | | | | | | | STONEVILLE 213 | | | | | | 98 PERCENT | | | | | | | | |
| 3 LM | 51 | 33 | 1.04 | 46 | 4.0 | 80 | 22 | 7.9 | 3.8 | 2 | 3 | 4.8 | 100 | 31 | 6.9 | 5.0 | 100 | 70 | 29 | 23 | 59 |
| HARPERSVILLE | | | | | | | DELTAPINE 16 | | | | | | 90 PERCENT | | | | | | | | |
| 3 SLM | 41 | 33 | 1.04 | 46 | 4.4 | 87 | 22 | 6.8 | 2.8 | 2 | 2 | 4.0 | 98 | 27 | 6.7 | 4.3 | 100 | 70 | 16 | 12 | 54 |
| GEORGIA | | | | | | | | | | | | | | | | | | | | | |
| DAWSON | | | | | | | STONEVILLE 213 | | | | | | 70 PERCENT | | | | | | | | |
| 3 LM | 51 | 33 | 1.11 | 43 | 4.7 | 78 | 22 | 6.6 | 4.1 | 3 | 2 | 5.4 | 91 | 27 | 6.3 | 4.5 | 100 | 70 | 23 | 19 | 51 |
| REYNOLDS | | | | | | | COKER 201 | | | | | | 100 PERCENT | | | | | | | | |
| 3 LM | 51 | 34 | 1.08 | 43 | 4.4 | 80 | 22 | 6.8 | 2.7 | 3 | 2 | 6.2 | 92 | 28 | 6.1 | 4.3 | 90 | 70 | 33 | 21 | 53 |
| SOUTH CENTRAL AREA | | | | | | | | | | | | | | | | | | | | | |
| LOUISIANA | | | | | | | | | | | | | | | | | | | | | |
| ALEXANDRIA | | | | | | | STONEVILLE 213 | | | | | | 75 PERCENT | | | | | | | | |
| 3 LM | 51 | 34 | 1.07 | 43 | 4.6 | 77 | 20 | 6.8 | 2.4 | 4 | 3 | 4.8 | 77 | 21 | 5.4 | 3.9 | 90 | 60 | 26 | 29 | 44 |
| LAKE PROVIDENCE | | | | | | | DELTAPINE 16 | | | | | | 100 PERCENT | | | | | | | | |
| 3 SLM | 41 | 35 | 1.13 | 45 | 4.2 | 79 | 21 | 8.0 | 3.3 | 2 | 2 | 3.9 | 109 | 35 | 7.4 | 5.3 | 80 | 70 | 21 | 20 | 68 |
| MONROE | | | | | | | DELTAPINE 16 | | | | | | 100 PERCENT | | | | | | | | |
| 3 SLM LT SP | 42 | 35 | 1.14 | 44 | 4.5 | 77 | 21 | 7.3 | 2.6 | 3 | 3 | 4.7 | 93 | 28 | 6.5 | 4.4 | 90 | 60 | 30 | 26 | 58 |
| OAK GROVE | | | | | | | DELTAPINE 16 | | | | | | 100 PERCENT | | | | | | | | |
| 3 SLM LT SP | 42 | 34 | 1.08 | 44 | 4.0 | 83 | 21 | 7.6 | 2.4 | 3 | 3 | 3.4 | 101 | 31 | 6.5 | 4.6 | 120 | 90 | 14 | 11 | 56 |
| MISSISSIPPI | | | | | | | | | | | | | | | | | | | | | |
| LAKE CORMORANT | | | | | | | DELTAPINE 16 | | | | | | 100 PERCENT | | | | | | | | |
| 3 SLM | 41 | 36 | 1.13 | 44 | 4.2 | 78 | 21 | 8.7 | 2.8 | 1 | 2 | 5.2 | 102 | 33 | 6.8 | 4.9 | 100 | 80 | 11 | 9 | 61 |
| PANTHER BURN | | | | | | | DELTAPINE 16 | | | | | | 100 PERCENT | | | | | | | | |
| 3 LM | 51 | 35 | 1.14 | 44 | 3.8 | 76 | 21 | 8.1 | 5.1 | 2 | 1 | 5.0 | 109 | 36 | 7.7 | 5.4 | 90 | 70 | 20 | 15 | 66 |

Table 3--Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1973--(Continued)

| Production Area, Classification & Sample Number | | | Fiber Test Results | | | | | | | | | Processing Test Results - Carded Yarns | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Digital Fibrograph | | Mike | Fiber Strength | | Elon-gat'n 1/8" | S.A. Non-Lint | Color Raw Stock | | P & C Waste | Strength | | Elongation | | Appearance Index | | Imprfect'ns | | Spin. Potential |
| No | Grade Name & Code | Stple | 2.5% span | Unif. | | Zero Gage | 1/8" Gage | | | Gra | Yel | | 22s or 27 tx | 50s or 12 tx | 22s or 27 tx | 50s or 12 tx | 22s or 27 tx | 50s or 12 tx | 22s or 27 tx | 50s or 12 tx | |
| | | 32s | In | Pct | Rdg | Mpsi | G/tex | Pct | Pct | No | No | Pct | Lbs | Lbs | Pct | Pct | No | No | No | No | No |
| SOUTHWEST AREA | | | | | | | | | | | | | | | | | | | | | |
| NORTHWEST TEXAS | | | | | | | | | | | | | | | | | | | | | |
| BROWNFIELD | | | | | | | DELTAPINE SR-1 | | | | | | 70 PERCENT | | | | | | | | |
| 3 | SLM | 41 | 33 | 1.04 | 47 | 3.9 | 92 | 24 | 6.1 | 2.3 | 1 | 3 | 5.9 | 111 | 35 | 6.3 | 4.6 | 80 | 70 | 20 | 20 | 63 |
| LUBBOCK | | | | | | | COKER 5110 | | | | | | 100 PERCENT | | | | | | | | |
| 3 | SLM | 41 | 34 | 1.07 | 44 | 4.2 | 83 | 23 | 7.1 | 4.5 | 1 | 3 | 5.2 | 91 | 27 | 5.8 | 4.5 | 80 | 70 | 18 | 16 | 45 |
| O'DONNELL | | | | | | | LOCKETT 4789 | | | | | | 70 PERCENT | | | | | | | | |
| 3 | MID LT SP | 32 | 31 | 1.03 | 42 | 3.6 | 78 | 22 | 7.0 | 3.3 | 3 | 3 | 6.4 | 91 | 25 | 6.2 | 4.2 | 70 | 60 | 23 | 21 | 49 |
| RAYLAND | | | | | | | LOCKETT 4789A | | | | | | 100 PERCENT | | | | | | | | |
| 2 | SLM | 41 | 33 | 1.08 | 45 | 4.6 | 85 | 24 | 6.4 | 4.7 | 2 | 3 | 6.6 1/ | 109 | 36 | 6.7 | 4.9 | 90 | 80 | 13 | 12 | 58 |
| ROPESVILLE | | | | | | | LOCKETT 4789A | | | | | | 100 PERCENT | | | | | | | | |
| 3 | MID | 31 | 32 | 1.07 | 45 | 3.4 | 86 | 23 | 6.9 | 3.9 | 1 | 3 | 4.7 | 106 | 32 | 6.7 | 4.6 | 100 | 80 | 14 | 11 | 56 |
| VERNON | | | | | | | LOCKETT BXL | | | | | | 100 PERCENT | | | | | | | | |
| 2 | SLM LT SP | 42 | 33 | 1.08 | 43 | 4.3 | 82 | 22 | 7.0 | 4.7 | 3 | 4 | 5.9 | 102 | 31 | 6.6 | 4.6 | 100 | 70 | 12 | 9 | 52 |
| WELCH | | | | | | | PAYMASTER 111A | | | | | | 75 PERCENT | | | | | | | | |
| 2 | SLM | 41 | 32 | 1.03 | 45 | 4.0 | 83 | 21 | 6.9 | 3.6 | 1 | 3 | 6.1 1/ | 98 | 28 | 6.4 | 4.8 | 90 | 70 | 13 | 14 | 51 |
| OKLAHOMA | | | | | | | | | | | | | | | | | | | | | |
| WEBBERS FALLS | | | | | | | DELTAPINE 16 | | | | | | 95 PERCENT | | | | | | | | |
| 3 | SLM | 41 | 36 | 1.16 | 44 | 3.8 | 80 | 22 | 8.5 | 4.2 | 2 | 2 | 5.7 | 107 | 35 | 7.7 | 5.4 | 100 | 70 | 14 | 12 | 66 |
| WEST AREA | | | | | | | | | | | | | | | | | | | | | |
| ARIZONA | | | | | | | | | | | | | | | | | | | | | |
| BOWIE | | | | | | | STONEVILLE 213 | | | | | | 97 PERCENT | | | | | | | | |
| 3 | MID | 31 | 35 | 1.10 | 45 | 3.9 | 78 | 22 | 7.3 | 2.6 | 0 | 3 | 4.6 1/ | 105 | 32 | 6.6 | 4.7 | 110 | 80 | 9 | 8 | 55 |
| BUCKEYE | | | | | | | STONEVILLE 213 | | | | | | 100 PERCENT | | | | | | | | |
| 3 | MID | 31 | 35 | 1.08 | 44 | 4.7 | 95 | 23 | 5.8 | 3.2 | 0 | 3 | 6.8 | 93 | 27 | 5.7 | 3.9 | 110 | 80 | 8 | 6 | 44 |
| PARKER | | | | | | | DELTAPINE 16 | | | | | | 100 PERCENT | | | | | | | | |
| 3 | MID | 31 | 35 | 1.10 | 44 | 4.0 | 84 | 23 | 7.1 | 2.9 | 0 | 2 | 4.5 1/ | 103 | 32 | 6.8 | 4.6 | 100 | 80 | 11 | 9 | 55 |
| SELMA | | | | | | | DELTAPINE 16 | | | | | | 100 PERCENT | | | | | | | | |
| 3 | MID | 31 | 35 | 1.10 | 42 | 3.5 | 83 | 21 | 7.4 | 4.2 | 0 | 2 | 4.5 1/ | 109 | 35 | 6.9 | 5.1 | 100 | 70 | 11 | 9 | 60 |

1/ Cotton stuck to processing rolls

Table 3--Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1973--(Continued)

| Production Area, Classification & Sample Number | | | Fiber Test Results | | | | | | | | | Processing Test Results - Carded Yarns | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Digital Fibrograph | | Mike | Fiber Strength | | Elon-gat'n 1/8" | S.A. Non-Lint | Color Raw Stock | | P & C Waste | Strength | | Elongation | | Appearance Index | | Imprfect'ns | | Spin. Potential |
| No | Grade Name & Code | Stple | 2.5% span | Unif. | | Zero Gage | 1/8" Gage | | | Gra | Yel | | 22s or 27 tx | 50s or 12 tx | 22s or 27 tx | 50s or 12 tx | 22s or 27 tx | 50s or 12 tx | 22s or 27 tx | 50s or 12 tx | |
| | | 32s | In | Pct | Rdg | Mpsi | G/tex | Pct | Pct | No | No | Pct | Lbs | Lbs | Pct | Pct | No | No | No | No | No |
| WEST AREA--(Continued) | | | | | | | | | | | | | | | | | | | | | |
| CALIFORNIA | | | | | | | | | | | | | | | | | | | | | |
| BRAWLEY | | | | | | | DELTAPINE 16 | | | | | | 100 PERCENT | | | | | | | | |
| 3 MID | 31 | 35 | 1.12 | 43 | 4.4 | 89 | 23 | 7.0 | 2.0 | 1 | 2 | 4.8 | 108 | 36 | 6.5 | 4.6 | 100 | 70 | 13 | 11 | 60 |
| CHOWCHILLA | | | | | | | ACALA SJ-1 | | | | | | 99 PERCENT | | | | | | | | |
| 3 SLM | 41 | 36 | 1.13 | 46 | 3.6 | 89 | 26 | 5.5 | 3.1 | 2 | 2 | 5.0 | 130 | 45 | 6.3 | 4.7 | 100 | 70 | 16 | 12 | 76 |
| COALINGA | | | | | | | ACALA SJ-1 | | | | | | 100 PERCENT | | | | | | | | |
| 3 SLM | 41 | 36 | 1.11 | 45 | 3.1 | 92 | 25 | 5.4 | 3.2 | 2 | 3 | 4.2 | 119 | 43 | 6.1 | 4.6 | 80 | 60 | 16 | 14 | 77 |
| DOS PALOS | | | | | | | ACALA SJ-1 | | | | | | 100 PERCENT | | | | | | | | |
| 3 SLM | 41 | 36 | 1.13 | 48 | 3.8 | 98 | 25 | 5.6 | 2.2 | 1 | 2 | 3.7 1/ | 131 | 47 | 6.6 | 4.9 | 110 | 80 | 9 | 9 | 84 |
| WASCO | | | | | | | ACALA SJ-1 | | | | | | 100 PERCENT | | | | | | | | |
| 3 MID | 31 | 35 | 1.09 | 43 | 4.4 | 95 | 25 | 5.8 | 2.5 | 1 | 3 | 4.6 1/ | 108 | 35 | 5.6 | 4.1 | 100 | 70 | 13 | 11 | 53 |
| WEST TEXAS | | | | | | | | | | | | | | | | | | | | | |
| PECOS | | | | | | | DELTAPINE 16 | | | | | | 100 PERCENT * | | | | | | | | |
| 3 MID | 31 | 34 | 1.07 | 39 | 2.7 | 81 | 22 | 8.4 | 2.5 | 0 | 2 | 5.3 1/ | 106 | 33 | 7.3 | 5.4 | 80 | 60 | 18 | 19 | 58 |
| PECOS | | | | | | | STONEVILLE 213 | | | | | | 100 PERCENT * | | | | | | | | |
| 3 MID | 31 | 34 | 1.05 | 42 | 3.3 | 81 | 20 | 7.3 | 2.4 | 0 | 3 | 4.9 1/ | 99 | 31 | 7.2 | 4.9 | 90 | 70 | 16 | 12 | 49 |

* 100 percent selected for tests, less than 100 percent in the area

Table 4 --Cotton, American upland long staple: Quality characteristics by production areas, crop of 1973

| Production Area, Classification & Sample Number | | | Fiber Test Results | | | | | | | | | Processing Test Results - Carded Yarns | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Digital Fibrograph | | Mike | Fiber Strength | | Elon-gat'n 1/8" | S.A. Non-Lint | Color Raw Stock | | P & C and Comber Waste | Strength | | Elongation | | Appearance Index | | Imprfect'ns | | Spin. Potential |
| No | Grade Name & Code | Stple | 2.5% span | Unif. | | Zero Gage | 1/8" Gage | | | Gra | Yel | | 22s or 27 tx | 50s or 12 tx | 22s or 27 tx | 50s or 12 tx | 22s or 27 tx | 50s or 12 tx | 22s or 27 tx | 50s or 12 tx | |
| | | 32s | In | Pct | Rdg | Mpsi | G/tex | Pct | Pct | No | No | Pct | Lbs | Lbs | Pct | Pct | No | No | No | No | No |
| SOUTHEAST | | AREA | | | | | | | | | | | | | | | | | | | |
| GEORGIA | | | | | | | | | | | | | | | | | | | | | |
| COMER | | | | | | | COKER 310 | | | | | | | | | | | | | | |
| 3 | SLM LT SP | 42 34 | 1.10 | 44 | 4.9 | 80 | 23 | 6.4 | 3.4 | 3 | 3 | 7.8 | 96 | 26 | 6.1 | 4.1 | 120 | 90 | 7 | 6 | 51 |
| | | | | | | | | | | | | 100 PERCENT | | | | | | | | | |
| | | | | | | | | | | | | * 17.7 | 114 | 39 | 6.4 | 4.7 | 120 | 100 | 5 | 3 | |
| WEST | | AREA | | | | | | | | | | | | | | | | | | | |
| NEW MEXICO | | | | | | | | | | | | | | | | | | | | | |
| LAS CRUCES | | | | | | | ACALA 1517-V | | | | | | | | | | | | | | |
| 3 | MID | 31 36 | 1.14 | 43 | 2.9 | 96 | 27 | 6.3 | 3.5 | 1 | 3 | 8.4 | 130 | 45 | 6.8 | 5.0 | 70 | 60 | 20 | 18 | 83 |
| | | | | | | | | | | | | 100 PERCENT 1/ | | | | | | | | | |
| | | | | | | | | | | | | * 18.1 | 150 | 53 | 6.9 | 5.1 | 80 | 70 | 13 | 9 | |
| WEST TEXAS | | | | | | | | | | | | | | | | | | | | | |
| DELL CITY | | | | | | | ACALA 1517-C | | | | | | | | | | | | | | |
| 2 | MID | 31 36 | 1.09 | 43 | 3.4 | 85 | 25 | 6.6 | 3.1 | 1 | 3 | 8.6 | 122 | 42 | 6.4 | 4.8 | 100 | 90 | 18 | 11 | 71 |
| | | | | | | | | | | | | 80 PERCENT | | | | | | | | | |
| | | | | | | | | | | | | * 18.2 | 143 | 49 | 6.9 | 5.1 | 120 | 90 | 8 | 6 | |
| EL PASO | | | | | | | ACALA 1517-70 | | | | | | | | | | | | | | |
| 3 | SLM | 41 36 | 1.12 | 44 | 2.8 | 90 | 28 | 6.4 | 4.2 | 1 | 2 | 9.2 | 138 | 50 | 6.9 | 5.3 | 70 | 60 | 28 | 17 | 96 |
| | | | | | | | | | | | | 90 PERCENT | | | | | | | | | |
| | | | | | | | | | | | | * 16.2 | 156 | 55 | 7.3 | 5.8 | 80 | 70 | 16 | 12 | |

* Comber Waste and Combed Yarn Data
1/ 100 percent selected for tests, less than 100 percent in the area

Table 5--Cotton, American Pima extra long staple: Quality characteristics by production areas, crop of 1973

| Production Area, Classification & Sample Number | | | Fiber Test Results | | | | | | | | | Processing Test Results - Combed Yarns | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Array Length | | Mike | Fiber Strength | | Elon-gat'n 1/8" | S.A. Non-Lint | Color Raw Stock | | P & C Waste | Comber Waste | Strength | | Elongation | | Appearance Index | | Imprfect'ns | |
| No | Grade Name & Code | Stple | UQL | CV | | Zero Gage | 1/8" Gage | | | Gra | Yel | | | 50s or 12 tx | 80s or 7 tx | 50s or 12 tx | 80s or 7 tx | 50s or 12 tx | 80s or 7 tx | 50s or 12 tx | 80s or 7 tx |
| | | 32s | In | Pct | Rdg | Mpsi | G/tex | Pct | Pct | No | No | Pct | Pct | Lbs | Lbs | Pct | Pct | No | No | No | No |
| WEST | | AREA | | | | | | | | | | | | | | | | | | | |
| ARIZONA PEORIA | | | | | | | PIMA S-4 | | | | | | 100 PERCENT | | | | | | | | |
| 2 | 4 | 44 | 1.49 | 30 | 3.9 | 109 | 36 | 6.8 | 3.7 | 3 | 4 | 8.5 | 20.3 | 70 | 39 | 5.4 | 4.9 | 120 | 110 | 1 | 1 |
| SAFFORD | | | | | | | PIMA S-4 | | | | | | 80 PERCENT | | | | | | | | |
| 2 | 3 | 44 | 1.51 | 30 | 3.7 | 103 | 33 | 7.4 | 3.0 | 4 | 5 | 8.3 | 21.3 | 69 | 39 | 5.5 | 4.9 | 120 | 120 | 0 | 0 |
| STANFIELD | | | | | | | PIMA S-4 | | | | | | 100 PERCENT | | | | | | | | |
| 2 | 4 | 44 | 1.49 | 32 | 3.8 | 103 | 36 | 7.0 | 4.5 | 4 | 5 | 9.3 | 19.6 | 70 | 39 | 5.5 | 4.8 | 110 | 110 | 0 | 1 |
| WEST TEXAS EL PASO | | | | | | | PIMA S-4 | | | | | | 100 PERCENT | | | | | | | | |
| 3 | 3 | 44 | 1.42 | 33 | 3.4 | 101 | 33 | 6.9 | 4.7 | 4 | 5 | 8.8 | 18.4 | 66 | 36 | 5.2 | 4.9 | 120 | 110 | 1 | 1 |

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